

4.0 DRAFT SECTION 4(F) EVALUATION

4.1 INTRODUCTION

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C. 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.” Section 4(f) specifies that “the Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if:

1. There is no prudent and feasible alternative to using that land; and
2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

Section 4(f) further states “The Secretary of Transportation shall cooperate and consult with the Secretaries of the Interior, Housing and Urban Development, and Agriculture, and with the States, in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of lands crossed by transportation activities or facilities.”

Use is defined in 23 CFR 774.17 as follows.

Use occurs when:

1. Land is permanently incorporated into a transportation facility;
2. There is a temporary occupancy of land that is adverse in terms of the statute’s preservationist purpose as determined in Section 774.13(d); or
3. There is a constructive use of a Section 4(f) property as determined by criteria in Section 774.15.

Constructive Use occurs when the transportation project does not incorporate land from a section 4(f) resource, but the project’s proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under section 4(f) are substantially impaired. Substantial impairment occurs when the protected activities, features or attributes of the resource are substantially diminished.

In March of 2008, FHWA and Federal Transit Administration (FTA) published a final rule that updates the Section 4(f) regulations. This update included the definition of *de minimis* impacts. According to 23 CFR 774.17 a *de minimis* impact is defined as follows:

De minimis impact. (1) For historic sites, *de minimis* impact means that the Administration has determined, in accordance with 36 CFR Part 800 that no historic property is affected by the project or that the project will have “no adverse effect” on the historic property in question. (2) For parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that will not

adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f).”

A *de minimis* impact must be determined following the requirements of 23 CFR 774.3(b), which state “The Administration determines that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact, as defined in §774.17, on the property.” The determination must also involve coordination with consulting parties according to 23 CFR 774.5(b)(1), which states “(b) Prior to making *de minimis* impact determinations under §774.3(b), the following coordination shall be undertaken:

(1) For historic properties:

- (i) The consulting parties identified in accordance with 36 CFR part 800 must be consulted; and
- (ii) The Administration must receive written concurrence from the pertinent State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO), and from the Advisory Council on Historic Preservation (ACHP) if participating in the consultation process, in a finding of “no adverse effect” or “no historic properties affected” in accordance with 36 CFR part 800. The Administration shall inform these officials of its intent to make a *de minimis* impact determination based on their concurrence in the finding of “no adverse effect” or “no historic properties affected.”
- (iii) Public notice and comment, beyond that required by 36 CFR part 800, is not required.

(2) For parks, recreation areas, and wildlife and waterfowl refuges:

- (i) Public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the property must be provided. This requirement can be satisfied in conjunction with other public involvement procedures, such as a comment period provided on a NEPA document.
- (ii) The Administration shall inform the official(s) with jurisdiction of its intent to make a *de minimis* impact finding. Following an opportunity for public review and comment as described in paragraph (b)(2)(i) of this section, the official(s) with jurisdiction over the Section 4(f) resource must concur in writing that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. This concurrence may be combined with other comments on the project provided by the official(s).

A *de minimis* impact determination under §774.3(b) shall include sufficient supporting documentation to demonstrate that the impacts, after avoidance, minimization, mitigation, or enhancement measures are taken into account, are *de minimis* as defined in §774.17; and that the coordination required in §774.5(b) has been completed (23 CFR 774.7(b)).

4.2 DESCRIPTION OF PROPOSED ACTION

FHWA, Navajo DOT and UDOT are proposing improvements along an 8.5-mile stretch of SR-162 from Montezuma Creek to Aneth in San Juan County, Utah (**Figure 1.1**). The highway improvements would connect to previously completed safety improvements east of Aneth. The proposed action also includes improvements to the intersection of SR-162 and SR-262 in Montezuma Creek. The focus of the project is to improve overall safety along the highway corridor by correcting roadway deficiencies and reducing potential conflicts with pedestrians and grazing animals. To satisfy current and expected functional needs for SR-162 between Montezuma Creek and Aneth, the roadway needs to be updated to meet current AASHTO and

UDOT roadway and safety standards. Further details concerning the Purpose and Need are presented in Chapter 1 of the EIS.

4.2.1 Description of Build Alternatives

Two groups of alternatives were developed for the purpose of the proposed action. Those alternatives are summarized below. For a detailed description of the Build Alternatives, please refer to Chapter 2 of the EIS.

4.2.1.1 Intersection Build Alternatives

The first group of alternatives focuses on improvements to the intersection of SR-162, SR-262, and CR 450 in Montezuma Creek, Utah. Please refer to **Figure 2.1** of the EIS for an overview of the current intersection alignments. There are currently two intersections located approximately 200 feet apart: the intersection of SR-262 and SR-162, and the intersection of SR-162 and CR 450. The distance between the intersections is inadequate under current standards, and creates the potential for driver confusion and traffic backup into the main travel lanes of SR-162.

In addition to the No Action Alternative, there are three Intersection Build alternatives designated as Intersection Alternatives A, B, and C. The four intersection alternatives are described in further detail below.

Intersection Alternative A - Alternative A would realign the roadways of both the east and west approaches. The center of the newly aligned single intersection would be located approximately 87 feet north of the existing SR-162/CR 450 intersection (see **Figure 2.3** of the EIS). The west approach of SR-162 would be curved south to connect to the existing east approach of SR-162. A long curve on the east approach would be used to tie the two sections together. The new intersection would be at a slight angle to its existing north-south alignment.

Intersection Alternative B - Under Alternative B, the new intersection would be located at the current location of the SR-162/262 intersection. It would retain the existing west approach of SR-162 while realigning the east approach to allow for the free-flow movement of eastbound and westbound traffic (see **Figure 2.4** of the EIS). This alternative would set the north-south and east-west alignments at exactly 90 degrees (perpendicular) to one another.

Alternative B would move the intersection, currently near the Montezuma Creek Elementary School, an additional 140 feet to the north of the school. As a result, the roadway would also be farther away from the school. The entrance and exit driveways to the school would be extended to meet the new roadway alignment. East of the intersection, the roadway curve would be realigned to allow for the transition of the existing roadway to the new intersection.

Intersection Alternative C - Under Alternative C, the new intersection would be located at the current location of the SR-162/CR 450 intersection and focuses primarily on realignment of the roadway west of the intersection. As with Alternative B, the roadway curve west of the intersection would be realigned to allow for the transition of the new roadway to the existing roadway. The intersection of the north-south and east-west roadways would be perpendicular (see **Figure 2.5** of the EIS).

4.2.1.2 Highway Build Alternatives

The second group of project alternatives focuses on the roadway alignment and design of SR-162 between the towns of Montezuma Creek and Aneth, Utah. These alternatives start at the approximate point where the intersection alternatives end in Montezuma Creek and continue to approximately 0.5 mile east of Aneth, where they connect with a section of SR-162 that was previously renovated. The two Highway Build alternatives are designated as Alternative One and Alternative Two. The third alternative is the No Action alternative. The three highway alternatives are described in greater detail in the following sections.

Alternative One - Alternative One would maintain the existing roadway alignment, but widen the roadway from approximately 26 feet to 44 feet (see **Figures 2.6** through **2.41** of the EIS). The existing 12-foot travel lanes would be maintained. However, a wider shoulder would be added to improve safety.

The clear zone would also be improved by re-grading or protecting steep side slopes, as the existing conditions potentially restrict vehicle recovery. Vertical alignment would be adjusted to improve roadway drainage by increasing the grade, or slope, of the roadway in selected areas. The vertical alignment refers to the elevation of the roadway surface. Planned improvements under Alternative One include:

- Total roadway widened to 44 feet
- Shoulder widths would be 10 feet
- Clear zone would vary from 12 feet to 26 feet depending on posted speed limit
- Intersection sight distance would be increased to meet current standards found in Chapter 9 of "AASHTO - Geometric Design of Highways and Streets"
- Several culverts would be replaced and there would be several new culverts installed (refer to **Figures 2.7** through **2.41** of the EIS for an overview of culvert replacement and addition)
- Crossings would be added for domestic livestock and wildlife (refer to **Figures 2.7** through **2.41** of the EIS for a location of the new crossing areas)

Alternative Two - Alternative Two would also widen the roadway to approximately 44 feet. Alternative Two would consist of relatively minor (20-foot or less) deviations in the horizontal alignment from the existing roadway with the goal of further minimizing encroachments on environmentally sensitive areas (refer to **Figures 2.6** through **2.41** of the EIS). The horizontal alignment is the location of the roadway from an overhead perspective. For example, a roadway could shift north or south of its current alignment and that would be a horizontal shift. The vertical alignment would be similar to Alternative One, but adjusted in certain locations to minimize impacts to environmentally sensitive areas, rock cliffs, and existing culverts. This would be accomplished by reducing the amount of excavation necessary to provide prescribed shoulder widths and clear zone requirements. The specific shifts in the horizontal alignment, including references to highway mile posts (M.P.) are shown in **Figure 2.6** of the EIS and summarized below.

- M.P. 15.5 – The location of the curve would be moved to the south
- M.P. 16.5 and M.P. 17.5 – The location of the curves would be moved to the south
- M.P. 17.5 – The curve radius would be increased, thus shifting the road alignment to the west
- M.P. 19 – The curve radius would be increased, thus shifting the road alignment to the west
- M.P. 22 – The road would be realigned or coordinated to match the proposed alignment of the bridge across McElmo Creek

4.3 SECTION 4(F) PROPERTIES

Section 4(f) properties within the project study area include seven historic properties. Two of these are archaeological sites that warrant preservation in place, four are TCPs, and one is an IUA. In accordance with 23 CFR 774.13(b), an archaeological site is not protected under Section 4(f) when the Administration concludes that the archaeological resource is important primarily because of what can be learned by data recovery and has minimal value for preservation in place. There are also two recreation facilities that qualify as Section 4(f) properties in the project area. The recreation facilities include a swimming pool and a school playground. There are no parks or wildlife and waterfowl refuges in the project study area. The following sections describe the historic properties (including the TCPs and IUA) and recreation facilities that meet Section 4(f) criteria.

4.3.1 Historic Properties

UT-C-43-294: Tower-Kiva Complex

This site is an archaeological site that was recorded as a Pueblo III (A.D. 1100-1300) Anasazi tower and kiva complex (**Figure 4.1**). The site is situated predominantly on a bench above the San Juan River, and extends southward along the cliff face and talus slope south of this bench. Feature 1 is a circular-shaped depression with a masonry wall alignment, interpreted as a kiva. Feature 2, located at the high point on the bench, is a circular, collapsed feature comprising a large concentration of cut and uncut sandstone rocks and slabs. Sandstone rocks and slabs have eroded downslope.



Figure 4.1 - Site UT-C-43-294 Overview with Tower on top and Kiva on Slope, Looking Southeast

Testing activities were conducted at this site during the early 1990s to determine the site's potential for nomination to the National Register of Historic Places (NRHP) and to determine the absence or presence of buried cultural material. The site was re-identified and rerecorded by the Navajo Nation Archaeological Department (NNAD) for this project.

The site is eligible under Criterion C because it 1) illustrates the distinctive characteristics of this site type and the planning and design of the complex of connected towers in this area; and 2) illustrates the type and method of construction of towers/kiva sites. The site is also eligible under Criterion D for its information potential. The site possesses integrity of location, setting, design, workmanship, and association.

The site has spiritual, cultural, and historic significance to the Navajo Nation and to several other tribal groups who considered this area part of their history as well. It was identified during site visits by members of various tribes as a possible lookout, a crier's structure, and a vision quest site. It was noted by one tribal member that if the tower is impacted, the associated sites and cultural landscape would be affected as well. As he stated, "The Native People would highly object to impacting these sites."

Because the site possesses qualities other than its information potential and because it has significance to Native American groups, it warrants preservation in place and thus qualifies for protection under Section 4(f).

UT-C-43-297: Temporary Camp/Death Structure

This site is the remains of a log (brush) shade structure used seasonally as a field house, associated with a historic Navajo component (1930s) (**Figure 4.2**). Ethnographic information indicated that a man had died and was left in the house. The structure was allowed to collapse to cover the deceased individual as a form of burial. During the construction of SR-262 in the early 1960s, the body was purportedly exhumed by missionaries and reburied elsewhere (location unknown).



Figure 4.2 - Site UT-C-43-297 Overview Looking West

This site is eligible for the NRHP under Criterion A because it is associated with a particular cultural tradition of the Navajo, known as a “burial hogan.” It is also eligible under Criterion D for its information potential. This site possesses integrity of location, setting, and association.

The site is important to the Navajo people as a spiritual site and as a burial site. Because the site possesses qualities other than its information potential and because it has significance to Native American groups, it warrants preservation in place and thus qualifies for protection under Section 4(f).

TCP-UT-104

This is an herb-gathering area within and adjacent to the ROW along SR-162 on both sides of the highway. It is used for collecting medicinal plants. The knowledgeable herbalists/practitioners who were interviewed recognize the fact that the plants growing immediately adjacent to the paved highway are transplants that feed off the highway runoff and are deemed blemished for ceremonial healing purposes. The informants attribute herb-collecting activities along the roadway to convenience rather than necessity, with easy access from the highway, no laborious activity involved in collection along the highway, and very little effort required for maximum

production being the primary reasons these areas have been used in the past. They stated that the plants are also available outside of the ROW. This TCP is eligible for the NRHP, and thus protected under Section 4(f).

TCP-UT-105

TCP-UT-105 is a gathering area for herbs, minerals, and other items. It was also once reported to contain a sacred garden and the homes of two deities, Talking Rock and Wind. These deities lived in a uranium mine just north of SR-162, which has since been reclaimed. Thus, the only remaining intact portion of the TCP is south of SR-162. Medicinal plants and general-use plants grow along the tributaries in the area and along the bank of the San Juan River. Informants stated that the collection location is very convenient as it provides easy access from the highway, requires no laborious activity, and is very efficient, with maximum production for minimal effort. They stated that the desired plants are not limited to the current collection area. The TCP is eligible for the NRHP, and thus is protected under Section 4(f).

TCP-UT-106

This is a ceremonial area (Enemy Way) used from approximately 1980 until 2004. There is no physical evidence of the gathering area left. The TCP is eligible for the NRHP and is protected under Section 4(f). This TCP will not be impacted by the proposed project and thus there will be no “use” of the Section 4(f) property.

TCP-UT-107

TCP-UT-107 consists of a log and clay Hogan structure, a ramada, and a cleared area. The TCP dates from approximately 1980 to the present. The TCP is eligible for the NRHP and is protected under Section 4(f). This TCP will not be impacted by the proposed project and thus there will be no “use” of the Section 4(f) property.

IUA C

IUA C is a homestead with blessed structures that has been in use since 1930 to the present. IUA C is eligible for the NRHP under criterion D and is protected under Section 4(f); however, it is outside the area of impact and thus there will be no “use” of the property and it will not be discussed further in the Section 4(f) documentation.

4.3.2 Recreation Facilities

Swimming Pool in Montezuma Creek

This is a recreation facility located in Montezuma Creek just east of the high school (**Figure 3.1**). The facility is owned by the Aneth Chapter of the Navajo Nation. This facility is open to the general public. This facility is considered a Section 4(f) resource because it is a public facility that is open to the general public, its major function is for recreation, and it is significant.

Playground at the Montezuma Creek Elementary School

The playground is located on the southwest side of the Montezuma Creek Elementary School (**Figure 3.1** of the EIS). The playground is open for use by the general public and therefore is considered a Section 4(f) resource.

4.4 IMPACTS TO SECTION 4(F) PROPERTIES

As discussed in Section 4.1, there are several types of property use that can be considered a Section 4(f) use. None of the Intersection Build alternatives would impact the recreation facilities, the TCPs, or the historic properties. None of the Highway Build Alternatives would impact the recreation facilities, and there would be no constructive use, temporary occupancy, or a *de minimis* use of any historic properties. There would be *de minimis* use of the TCPs, discussed in Section 4.4.1. There would also be Section 4(f) *non-de minimis* use of historic properties, as discussed in Section 4.4.2.

4.4.1 Section 4(f) *De Minimis* Impacts

TCP-UT-104 is used as an herb gathering area. However, because the plants are available in a larger area and not confined only to the ROW, a finding of no adverse effect under Section 106 was made by FHWA in concurrence with NNHPD, resulting in a *de minimis* impact determination for this TCP. NNHPD was notified of FHWA's intent to make *de minimis* impact determination. Likewise, TCP-UT-105 is used as a gathering area for plants and other items. Because the plants are available in a larger area and not confined only to the ROW, the proposed project will not adversely affect the TCP, resulting in a *de minimis* impact determination.

4.4.2 Section 4(f) *Non-De Minimis* Impacts

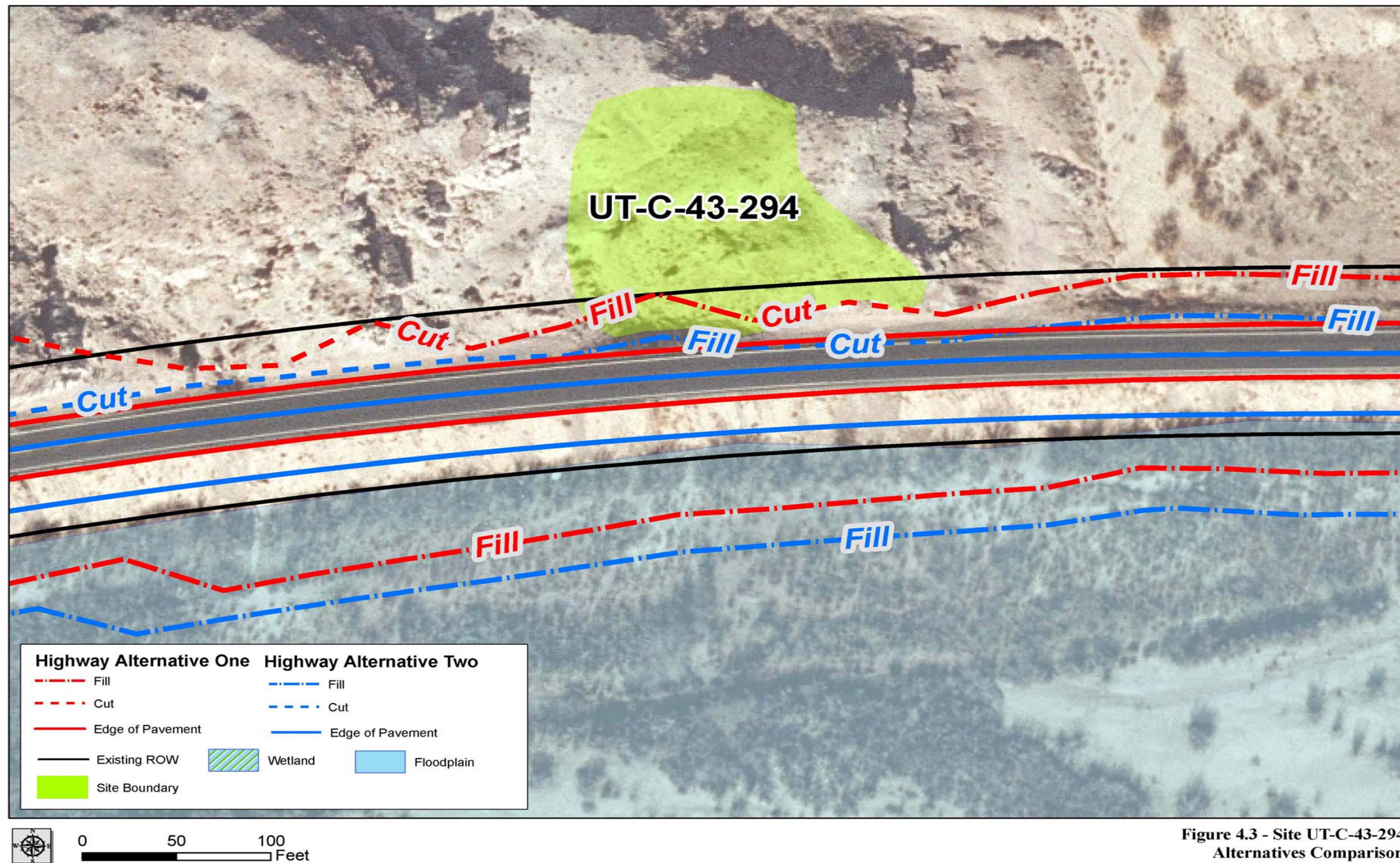
The extent of impacts to Section 4(f) properties varies depending on the Highway Build alternative being considered (none of the Intersection Build alternatives impact Section 4(f) properties). **Table 4.1** shows the properties that would be subject to a Section 4(f) *non-de minimis* use under the Highway Build alternatives (**Figure 4.3** and **Figure 4.4**). The figures show both Highway Build alternatives and their impacts to the sites. The following sections summarize Section 4(f) *non-de minimis* use impacts by alternative.

Table 4.1 - Use of Section 4(f) Properties by Alternative

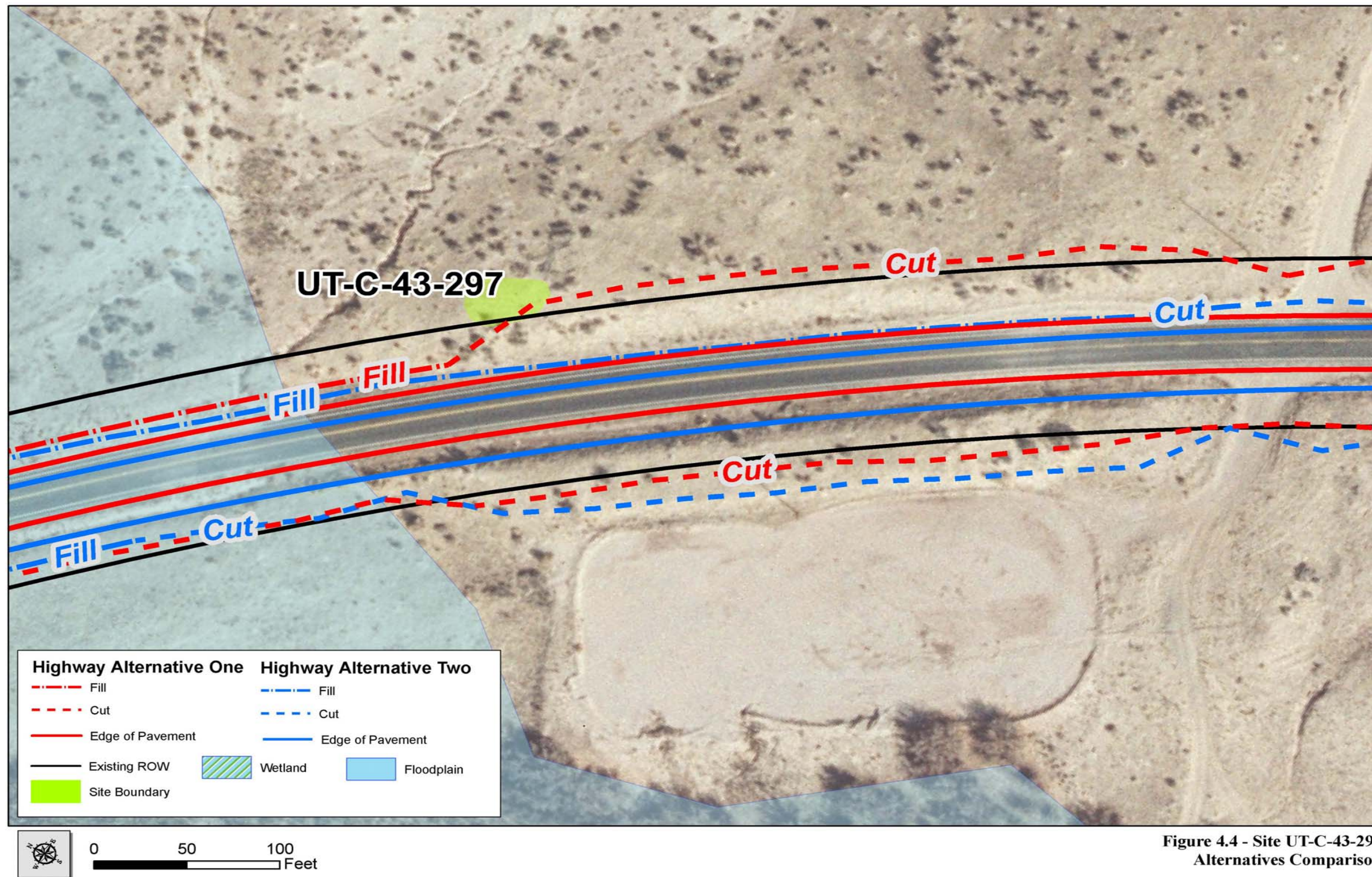
Site Number	Highway Build Alternative	
	One	Two
UT-C-43-294	X	
UT-C-43-297	X	
X = Section 4(f) <i>non-de minimis</i>		

Source: URS 2008

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**Figure 4.3 - Site UT-C-43-294
 Alternatives Comparison**



**Figure 4.4 - Site UT-C-43-297
 Alternatives Comparison**

4.4.2.1 Highway Alternative One

Alternative One results in a *non-de minimis* use of two Section 4(f) resources. Those resources include sites UT-C-43-294 and UT-C-43-297, as described in Section 4.3.1.

4.4.2.2 Highway Alternative Two

Alternative Two is an alternative that shifts the centerline of the highway to avoid sensitive resources, including Section 4(f) resources. Alternative Two would not result in the use of either Section 4(f) property.

4.4.2.3 Other Highway Alternative Considered

One alternative in a new location was briefly evaluated that would preserve existing Section 4(f) properties along SR-162 within the project study area.

Early in the project design process, an alternative was considered that would relocate the highway to an alignment south of the San Juan River. The original intent of the alternative was to avoid sensitive environmental areas along the existing highway alignment. This alternative was eliminated because it would not meet the project's Purpose and Need to address safety and deficiency concerns on SR-162 between Montezuma Creek and Aneth.

4.4.3 Summary

Highway Build Alternative Two for the SR-162; Montezuma Creek to Aneth project would avoid all Section 4(f) resources. It should be noted, however, that this is a preliminary analysis based on the existing plans for each of the Build alternatives and that these plans are subject to change.

Based on evaluation of both the Highway Build Alternatives, Alternative Two is a feasible and prudent alternative that would avoid impacts to Section 4(f) resources. Therefore, Alternative Two has been identified as the Preferred Highway Alternative based on the Section 4(f) evaluation.

4.5 Measures to Minimize Harm to Section 4(f) Properties

Avoidance, minimization, and mitigation measures have been considered during development of the Build Alternatives. As the Build Alternatives were developed, design modifications were made to lessen the impact on the Section 4(f) properties.

Mitigation commitments for the impacts of the Build alternatives on historic properties will be determined in consultation with Navajo Nation Tribal Historic Preservation Officer (THPO), FHWA, Navajo DOT, UDOT and other consulting parties. Those mitigation commitments will be described in a Historic Properties Treatment Plan (HPTP), in accordance with the Programmatic Agreement executed for this project.

4.6 Coordination

FHWA, UDOT, and NNAD have coordinated with the Navajo Nation Historic Preservation Department (NNHPD), the agency who has jurisdiction over the affected Section 4(f) resources. They have also coordinated with the Section 106 Consulting parties, including Tribes (Refer to Chapter 6 for a list of Section 106 Consulting Parties). Section 106 Consulting Parties were invited to participate in site visits if they so wished. There were several Tribes who did attend a site visit; the site visits are discussed in Chapter 6 – Public and Agency Coordination.

A letter of Determination of Eligibility and Finding of Effect (DOE-FOE) was sent to NNHPD to consult with them on the determinations of eligibility for the sites within the project APE, and to discuss the effects of the recommended Preferred Alternative on the properties. This letter identified the two archaeological sites as warranting preservation in place and thus as Section 4(f) resources. The remainder of the archaeological sites were determined by FHWA with concurrence from NNHPD that they do not warrant preservation in place (See **Appendix E**).

Further coordination with these agencies and consulting parties will continue throughout the NEPA process, the formal design process and implementation of any proposed mitigation measures.

4.7 Section 4(f) Determination

This determination is made at the time of the Final Section 4(f) Evaluation, not during the Draft.